October 9, 2002

D.T.E. 01-100-A

Investigation by the Department of Telecommunications and Energy on its own motion, pursuant to G.L. c. 164, §§ 76, 94 and 94A, to investigate the appropriateness of the use of Risk-Management Techniques to Mitigate Natural Gas Price Volatility.

TABLE OF CONTENTS

I. INTRODUCTION

On December 4, 2001, pursuant to G.L. c. 164, §§ 76 and 94A, the Department of Telecommunications and Energy ("Department") issued an order opening a Notice of Inquiry into the appropriateness of the use of risk-management techniques to mitigate natural gas price volatility. Risk-Management NOI, D.T.E. 01-100 (2001) ("D.T.E. 01-100"). The Department requested comments regarding the implementation of a potential risk-management protocol for Massachusetts local distribution companies ("LDCs"). Comments were filed by the Attorney General, the Competitive Suppliers,[1] Bay State Gas Company ("Bay State"), Blackstone Gas Company ("Blackstone"), The Berkshire Gas Company ("Berkshire"), the Division of Energy Resources ("DOER"), Duke Energy Trading and Marketing ("Duke"), El Paso Energy Marketing ("El Paso"), Fitchburg Gas and Electric Company ("Fitchburg"), KeySpan Energy Delivery-New England ("Keyspan"), Low Income Affordability Network, et al. ("LEAN"),[2] NStar Gas ("NStar"), Planalytics, and WeatherWise. Reply comments were filed by AllEnergy Gas and Electric Marketing Company, L.L.C., ("AllEnergy"), Duke, and DNL Risk-Management Associates. Inc. ("DNL").

The Department stated that it would consider the following issues in this proceeding: (1) whether Massachusetts gas utilities should be allowed, or required, to implement a

---

1 The competitive suppliers include AllEnergy Gas & Electric Marketing Company, L.L.C., SCASCO, Inc., Amerada Hess Corporation, Select Energy, The National Energy Marketers Association, and The New Power Company.

2 LEAN includes the Low-Income Affordability Network, the Weatherization and Fuel Assistance Program Network, and the Massachusetts Community Action Program Directors Association, Inc.

risk-management program to mitigate price volatility for gas customers; (2) how risk-management programs by LDCs would affect gas unbundling and customer choice in Massachusetts;[3] (3) whether an incentive mechanism should be allowed in conjunction with a risk-management program; (4) what standard of review the Department should apply; and (5) how costs for risk-management programs should be recovered. D.T.E. 01-100, at 1-3.

A distinction should be made regarding traditional forms of risk-management, which include the use of storage to offset winter demand, through the use of physical gas purchases and forward contracts, and modern risk-management functions, which use financial futures and options contracts to effectuate various forward pricing strategies. For purposes of this Order, both "risk-management" and "hedging"[4] are used interchangeably to mean the use of financial derivative[5] products in combination with physical gas purchases to mitigate commodity price volatility.[6]

---

[3] Throughout this Order, the terms "gas unbundling" and/or "customer choice," "retail competition" and "competitive markets" will be used interchangeably.

[4] The New York Mercantile Exchange ("NYMEX") defines a hedge as the initiation of a position in the futures or options market that is intended as a temporary substitute for the sale or purchase of the actual commodity. The NYMEX further refers to a hedger as a trader who enters the market with the specific intent of protecting an existing or anticipated physical market exposure from unexpected or adverse price fluctuations. The Department notes that hedging techniques may include the use of both exchange-traded and over-the-counter financial products.

[5] Derivatives are financial instruments that derive their value from the price of another product. Some examples of derivative products are: futures, options on futures, and swap contracts.

[6] The Commenters generally agreed that the primary objective of a risk-management program is to mitigate price volatility, not to reduce the overall cost of gas.

II. IMPLEMENTATION: REQUIRED OR ALLOWED?

A. Summary of the Comments

Bay State advocates the voluntary use of financial risk-management tools by gas utilities to stabilize prices (Bay State at 1). Blackstone suggests that Massachusetts gas utilities should not be required to implement a risk-management program and notes that the cost of implementing a risk-management program could exceed any potential customer benefits (Blackstone at 1). Blackstone suggests that the Department consider LDC proposals based on cost and size (id. at 2). Berkshire asserts that Massachusetts gas utilities are already allowed to implement a risk-management program through the use of storage and peaking resources (id. at 6). Berkshire recommends that the Department recognize the need for flexible, responsive and company-specific strategies, and asserts that any risk-management initiative should be voluntary (id. at 7). DOER recommends that the Department allow LDCs to expand their gas supply procurement and acquisition strategies to include a diversified mix of purchase options composed of those financial transactions that limit price increases and foster price stability (DOER at 3). Duke suggests that without hedging, gas utilities are at the whim of market prices, which can be very volatile; hence Duke recommends that the Department allow LDCs to engage in various price risk-management activities on a voluntary basis (Duke at 1-3). El Paso also recommends that the Department allow, but not require, LDCs to use price risk-management techniques to mitigate natural gas volatility (El Paso at 1).

Fitchburg believes that Massachusetts LDCs should be allowed, not required, to engage in risk-management techniques (Fitchburg at 2). Fitchburg notes that the use of risk-management techniques would permit LDCs to match more closely the price established in the Cost of Gas Adjustment ("CGA") and reduce the reliance on the CGA's "true up" mechanism (id.). KeySpan notes that LDCs currently engage in risk-management through the use of storage (KeySpan at 3). KeySpan recommends that any price risk-management program that utilizes financial instruments to reduce volatility should be a voluntary objective of a utility's current resource management activities (id. at 2). NStar asserts that the use of fixed price contracts and financial hedging instruments can be effective in minimizing price volatility (NStar at 2). NStar recommends that the Department allow, but not require, LDCs to implement such programs (id. at 7). Planalytics suggests that the Department encourage the implementation by LDCs of a risk-management program that incorporates different risk techniques in order to minimize price volatility and derive a consistently low gas price (Planalytics at 2). WeatherWise also indicates that the Department encourage Massachusetts LDCs to implement risk-management programs (WeatherWise at 3).

In contrast, the Attorney General recommends that Massachusetts LDCs not be allowed to engage in any hedging or risk-management activities except for what is currently being utilized through storage and fixed pricing strategies (Attorney General at 1). The Attorney General warns that financial derivative transactions are fraught with dangers for both customers and utilities, and neither the LDCs nor the regulators are prepared to analyze and evaluate the prudence of transactions in derivatives (id. at 2). The Attorney General notes that due to the efficiency of the gas derivatives market, any attempts by utilities to "beat the market" through the use of hedging techniques will fail (id. at 4).

LEAN recommends that the Department require LDCs to purchase their commodity gas on a laddered basis, using one or more conservative pricing strategies (e.g., purchasing some supplies for future delivery at prices fixed at the time of contract) (LEAN at 11). LEAN states that this method employs the principle of dollar-cost averaging similar to that used to dampen cost volatility in derivatives portfolios (id. at 12). However, LEAN does not advocate the use of financial derivative products, stating that there is no need to use instruments more complicated than a laddered series of long-term physical purchases (id. at 14).

Finally, the Competitive Suppliers suggest that Massachusetts LDCs be allowed to hedge, but on a limited basis. In particular, the Competitive Suppliers suggest that LDCs be authorized to hedge purchases for only six months forward because, they argue, locking in prices any further than six months forward will create distorted price signals for the customer (Competitive Suppliers at 3).

B. Analysis and Findings

The majority of commenters state that the use of financial risk-management tools to mitigate price volatility by LDCs should be allowed, but not required. The Department notes that risk-management programs that utilize financial instruments as part of a Company's supply planning process have the potential to yield benefits to customers in the form of commodity price stability. Further, natural gas risk-management tools may be used to mitigate price volatility and establish rate continuity, but these tools are not without costs. Derivative products such as natural gas futures, options, and swaps, when used in combination with physical gas purchases, may result in commodity costs above or below the actual index market for natural gas. However, due to the volatile and unpredictable nature of commodity derivatives markets, the Department concludes that financial risk-management programs are unlikely to produce prices below index levels averaged over time, though they may dampen volatility.

Regarding the Attorney General's argument that any attempts by LDCs to "beat the market" through the use of hedging techniques will fail, the Department notes that the purpose of a risk-management program is not to "beat the market" but to stabilize prices. Therefore, LDCs who engage in price hedging programs must maintain an objective of volatility mitigation and price stability rather than the objective of procuring prices below market indices. Attempting to obtain prices below published averages may lead to speculative pricing strategies that result in overall higher risk. Furthermore, since financial derivatives are designed primarily to reduce commodity price risk, a least cost strategy may be inconsistent with hedging.

The Department concludes that any benefits gained through the use of financial hedging have the potential to be offset by the costs associated with program implementation, particularly for smaller LDCs that do not currently have the in-house expertise to implement a hedging program. Although some expenses incurred from derivatives trading may be proportional to the volumes hedged, other costs incurred from developing risk-management strategies, such as professional staffing, information technology, and consulting may not be proportionate to the volumes hedged. Consequently, the cost of developing a risk-management program for smaller LDCs may outweigh the benefit of price stability. Furthermore, because such costs are not universal in nature and may vary depending on program design and size, the Department will review the appropriateness of financial risk-management programs on a company-specific basis.

The Attorney General expressed concern that risk-management programs that use financial derivatives should not be allowed because the risks associated with derivatives trading are too high for LDCs and consumers to bear. The Department, however, notes that these risks can appropriately be reviewed on a case-specific basis, and in unison with a LDC's supply design, size, and position in the market, before any determination could be made as to whether the risks are too high. Depending on the particular design of a LDC's financial risk-management program, the Department could determine that the use of certain financial derivatives are appropriate and not too risky. We therefore, do not adopt the Attorney General's suggestion that LDCs' use of financial risk-management instruments to mitigate price volatility be prohibited because of the risks associated with the use of such instruments.

With respect to the Competitive Suppliers' concern that fixing prices for a period longer than the next six-month CGA period may create false commodity price signals, the Department concludes that not all financial instruments and strategies would bring about the same result. The Department will review the effect that a company's use of financial hedging instruments will have on the reliability and the transparency[7] of commodity prices on a case-specific

---

[7] By reliable and transparent commodity prices we mean LDC prices that reflect accurately what the prevailing market prices are likely to be in a CGAC period. The Department will review a LDC's hedging program to ensure that the prices quoted are both reliable and transparent in that such prices do not provide customers with distorted or misleading price signals.

basis, taking into account the wide-ranging options, instruments, and strategies that are available to both the LDCs and Competitive Suppliers.

In conclusion, the Department will allow, but not require, Massachusetts LDCs to use financial risk-management instruments to mitigate commodity price volatility. The Department will review and approve LDC risk-management proposals on a case-specific basis. Having concluded that we will not mandate the use of financial risk-management instruments to mitigate price volatility, the Department must address the effect that the use of such instruments may have on gas unbundling and customer choice in Massachusetts in the event that one of the LDCs proposes a hedging program.

III. THE EFFECT OF RISK-MANAGEMENT PROGRAMS BY LDCS ON GAS UNBUNDLING AND CUSTOMER CHOICE IN MASSACHUSETTS

A. Summary of the Comments

Bay State argues that neither the goal of achieving price stability for customers nor the goal of promoting gas unbundling and customer choice should be pursued at the expense of the other (Bay State at 6). Bay State contends that customers should have the opportunity to benefit from both, which simply requires achieving the appropriate balance among important policy goals, and that it is possible to develop appropriately targeted price stability programs that could coexist with the current customer choice programs (id.). Bay State notes that one way that a hedging program could foster the development of competitive retail markets is that the resulting utility price would be more predictable which should provide competitive suppliers and marketers with the opportunity to offer important benefits to customers (id. at 7).

Berkshire does not believe that LDC risk-management programs would affect gas unbundling and customer choice in Massachusetts (Berkshire at 7). Berkshire notes that there has been significant migration of customers from sales to transportation on its system, and that residential as well as commercial and industrial customers are currently participating in the unbundled market (id.). Fitchburg takes the same position as Bay State and Berkshire and states that LDCs' use of risk-management tools to reduce price volatility would not negatively affect gas unbundling and customer choice in Massachusetts (Fitchburg at 4). Fitchburg contends that, by achieving price stability, financial hedging programs would make a LDC's CGA a more reliable price signal for both marketers and customers that are contemplating retail choice, and this should promote competition and customer choice in Massachusetts (id.).

KeySpan's view is that a risk-management program should not have any negative effect on gas unbundling and customer choice in Massachusetts because the same risk-management tools that are available to utilities are also available to third-party suppliers (KeySpan at 3). El Paso similarly states that while most third-party suppliers in customer choice programs already rely on risk-management tools to provide stable gas prices, LDCs' use of financial risk-management tools would improve the overall image of natural gas as a reliable fuel of choice in Massachusetts and this would increase gas demand as well as the number of new customers looking for reliable gas providers (El Paso at 6).

Duke states that LDCs' use of risk-management tools would not negatively affect the development of gas unbundling and customer choice in Massachusetts. Duke contends that allowing LDCs to engage in hedging would place them on a par, in terms of gas procurement practices, with other potential gas suppliers (Duke at 4). This, Duke argues, should provide the LDCs with a means of offering their sales customers fixed or more stable prices for gas supplies (id.). Duke, however, cautions that, in a fully-deregulated market, if LDCs are allowed to engage in risk-management activities, they (like their competitors) must assume the risk of the costs and losses inherent in those activities, so that all gas suppliers compete on a "level playing field" (id.). Like Duke, DOER does not believe that the implementation of financial risk-management programs by LDCs would negatively affect gas unbundling or customer choice in Massachusetts in the short term because the vast majority of a LDC's current default service customers are residential and small commercial and industrial customers who have few choices at this time (DOER at 4, 7 and 8). DOER argues that LDCs' use of risk-management tools will not prevent marketers and competitive suppliers from offering alternative hedging products to natural gas customers (id. at 8). DOER, however, cautions that it is critical that all hedging costs be borne by those customers using these products so that marketers and competitive suppliers can offer hedging products that compete against the true cost of the LDCs' hedging products (id. at 8, n.13).

LEAN argues that LDCs' use of financial risk-management tools would benefit low-income and other residential customers because these customers would receive the benefits of hedging strategies that are already available to large customers from marketers (LEAN at 12). LEAN does not believe that LDCs' use of financial hedging programs would negatively affect gas unbundling and customer choice in Massachusetts because competitive suppliers will be free to offer more risky and more complex hedging programs and services to those who desire them (id. at 13). DNL also argues that LDCs' use of financial risk-management tools will bring LDCs one step closer to being able to compete with other outside providers who may be providing risk-management products in their service territories (DNL at 8). DNL notes that the more flexibility the ultimate customer has to purchase according to its needs and conditions the better it is for the development of retail competition in Massachusetts (id.). Finally, like the previous commenters, Weatherwise states that a voluntary risk-management program by LDCs will increase customer choice and satisfaction in Massachusetts because these programs will encourage innovation and experimentation on the part of LDCs and maximize the value for customers (Weatherwise at 4).

Blackstone, NStar, the Attorney General, and Planalytics, on the other hand, contend that LDCs' use of financial risk-management tools would negatively affect gas unbundling and customer choice in Massachusetts. Blackstone states that if risk-management programs provide customers with a fixed-price option as an alternative to regular default service, this offering could be competitive with a fixed-price product offered by competitive suppliers and thus may hamper the development of third-party competitive gas sales (Blackstone at 3). NStar notes that one of the requirements necessary for the development of a competitive retail market for natural gas is the need to provide current and potential competitive suppliers and marketers with transparent price information regarding the prices charged by LDCs to their customers (NStar at 8). NStar also notes that where price transparency is lacking, competitive suppliers and marketers would find it difficult to anticipate what the LDCs' cost of gas will be at any given time (id. at 9). NStar argues that the ability of competitive suppliers and marketers to attract customers by offering distinct products and services, such as fixed-price options and other gas-cost management services, might be eroded if LDCs implement financial hedging programs to eliminate price volatility, because it will make it more difficult for competitive suppliers to distinguish their prices and products from those offered by the LDCs (id.). This, NStar argues, may impede the development of retail competition in Massachusetts (id. at 9).

The Attorney General's position is that LDCs' use of financial risk-management tools will stifle competition in the gas supply market and effectively reduce the availability of suppliers in the market (Attorney General at 11). The Attorney General states that now is not the time for the Department to give LDCs the option to use financial risk-management tools because the introduction of such new gas supply products at this time may deter new competitive suppliers from entering the market (id.). According to the Attorney General, given that customer choice in the Commonwealth has not yet fully taken hold among residential and small commercial and industrial customers, the Department should determine, in a public forum, whether and for how long LDCs will be in the merchant business before allowing LDCs to use risk-management tools (id.). Planalytics observes that, overall, LDC risk-management programs will result in stable, consistent pricing; thus the customer will benefit from both reduced price volatility and low prices (Planalytics at 2). However, Planalytics argues that an environment of low price volatility and stable prices could hamper the development of competition and customer choice because gas unbundling and customer choice programs become less attractive to consumers (id.).

Finally, the Competitive Suppliers state that the impact of LDCs' use of financial risk-management tools to mitigate gas price volatility on gas unbundling and customer choice will depend upon the design of the risk-management program (Competitive Suppliers at 7). The Competitive Suppliers explain that if the risk-management program is limited to locking-in prices for the next six months of a CGA period, then its impact on competition and customer choice will be limited (id.). The Competitive Suppliers note that, on the other hand, if LDCs are able to use financial hedging products to lock-in long-term futures contracts, then risk-management programs could produce significant unintended consequences for the competitive market (id.). The Competitive Suppliers observe that third-party suppliers and marketers have long advocated LDC default prices that reflect the market price of gas since these prices serve as the "cost to compare" for customers who are shopping in the competitive market (id.). The Competitive Suppliers argue that out-of-market commodity costs have created situations where third-party suppliers are shut out of the market for a period of time because of the lag between the time that market prices go up and LDC prices reflect market price changes (id.). The Competitive Suppliers explain that similar situations could occur if LDCs are allowed to purchase long-term futures contracts as part of their hedging programs (id. at 8).

B. Analysis and Findings

The promotion of gas unbundling and customer choice in Massachusetts is an important policy goal of the Department. See Gas Unbundling, D.T.E. 98-32-B, at 4 (1999). Specifically, the Department's overall goals for a competitive natural gas industry in Massachusetts are to: (1) provide the broadest possible customer choice; (2) provide all customers with an opportunity to share in the benefits of increased competition; (3) ensure full and fair competition in the gas supply market; (4) provide functional separation between sale of gas as a commodity and local distribution service; (5) support and further the goals of environmental regulation; and (6) rely on incentive regulation where a fully competitive market cannot exist, or does not yet exist. Therefore, it is important that the Department consider the likely effect of any financial risk-management program on the development of a competitive retail market in Massachusetts before it approves such programs.

The Department observes that, in response to this question, the majority of the commenters (i.e., ten out of the fourteen commenters) are of the view that LDCs' use of financial risk-management tools would not have a negative effect on the development of a competitive retail gas market in Massachusetts. Some of the commenters even believe that when LDCs are given the option to use financial risk-management products as part of their gas procurement strategies, this could promote the development of a competitive retail gas market in Massachusetts.

The Department's review of the comments in this proceeding leads us to conclude that the extent to which LDCs' use of financial risk-management tools could affect gas unbundling and customer choice will depend on the specifics of each risk-management program approved by the Department. Two issues are particularly important with respect to program design to ensure that such programs do not negatively affect the development of gas unbundling and customer choice in Massachusetts. These issues are (1) how LDCs will be allowed to recover risk-management related costs from customers ("Recovery of Risk-Management Costs"), and

(2) whether an incentive mechanism should be used in conjunction with LDCs' risk-management programs ("Use of an Incentive Mechanism").

The Department recognizes that financial hedging programs are costly; thus it is important that cost recovery provisions are clearly defined. The issue of cost recovery presents a number of complications from the standpoint of (1) fair treatment for ratepayers, and (2) ensuring efficient competition in Massachusetts' retail gas market.

Customers differ in their aversion to price volatility and in their "willingness to pay" for the cost of price volatility management. Some customers may choose to go with the market, not caring about price volatility, while others may be willing to pay a premium to have more stable prices. Furthermore, if the costs of a hedging program are allocated to all customers, participants and non-participants alike, the non-participating customers may experience price increases from a program in which they derive no benefits. This will be in direct conflict with the Department's well-established policy on cost allocation that cost responsibility must follow cost incurrence. See Boston Gas Company, D.P.U. 96-50 (Phase I), at 133-134 (1996); Boston Gas Company, D.P.U. 93-60, at 331-337, 410, 432 (1993); Bay State Gas Company, D.P.U. 92-111, at 54, 283-284, 311-312 (1992); Boston Edison Company, D.P.U. 1720, at 114 (1984); Generic Investigation of Rate Structures, D.P.U. 18810, at 14 (1977). The Department therefore concludes that customer participation in a LDC's financial risk-management program must be voluntary rather than mandatory, and the costs associated with such a program shall be recovered from only the customers who choose to participate in the program. Accordingly, the Department finds that a risk-management program must be designed to allocate all costs only to program participants.

Transparent and reliable price information is important for the development of competitive markets. The Department agrees with the Competitive Suppliers that financial risk-management programs would not negatively affect gas unbundling and customer choice if the recovery of program-related costs by the LDCs do not affect the reliability and transparency of the rates charged by LDCs. Since marketers use LDC rates as a "benchmark" in setting their prices, distorted price signals by the LDCs could affect the ability of marketers to compete in Massachusetts. Accordingly, the Department finds that a risk-management program, filed for review and approval by the Department, must include proposals for cost recovery as well as accurate and timely price information.

Since LDCs will be allowed to recover costs of a risk-management program only from those customers that participate in the program, the costs of the program should be readily apparent to the customer. One option would be for the LDCs to propose, as the commenters noted, a separate tariffed rate for those customers who choose to participate in the risk-management program (Blackstone at 4; NStar at 16; WeatherWise at 7). See Northern Utilities, Inc., DG 01-125, at 3 (2001) (New Hampshire). The Department declines to prescribe any specific cost-recovery mechanism at this time. Instead, we will review the LDC's cost-recovery proposal when the LDC proposes a risk-management program.

The Department concludes that financial risk-management programs would not adversely affect gas unbundling and customer choice in Massachusetts if they: (1) provide all customers with an opportunity to obtain more stable prices and costs are allocated only to those who participate in the program, and (2) ensure efficient competition among all suppliers involved in the merchant business.

In Section IV below, we discuss whether incentive mechanisms should be used in conjunction with risk-management programs.

IV. USE OF AN INCENTIVE MECHANISM

A. Summary of the Comments

Bay State does not recommend establishing an incentive mechanism as part of a price risk-management program (Bay State at 15). Bay State observes that incentive mechanisms are more appropriately associated with programs where the objective is to lower costs or increase service quality, but not with a price risk-management program where the objective is to stabilize prices (id. at 15 and 16).

Berkshire states that an incentive mechanism already exists in the context of Interruptible Transportation and Capacity Release, D.P.U. 93-141-A (1996)[8] ("D.P.U. 93-141-A"), at least for some risk-management opportunities (Berkshire at 10). Berkshire notes that if more traditional risk-management measures are implemented, the Department should consider adjustments to the parameters of D.P.U. 93-141-A (id. at 11). Berkshire explains that more extensive risk-management plans should be implemented in the context of a comprehensive planning evaluation and rate plan so that risk and reward are treated symmetrically and to

---

[8] In D.P.U. 93-141-A, the Department issued a decision on the availability and proper rate for interruptible transportation by LDCs within the Commonwealth and related issues pertaining to LDCs release of capacity in the interstate pipeline system.

ensure the implementation of an appropriate incentive structure (id. at 10 and 11). Fitchburg states that because the CGA is currently oriented toward cost recovery, without either significant risks to recovery or benefit of profit to LDCs, the justification for the Department to establish an incentive mechanism as part of a risk-management program is reduced (Fitchburg at 9).

KeySpan strongly opposes the use of incentive mechanisms as part of LDCs' risk-management programs (KeySpan at 6). KeySpan explains that the Department may determine that it is reasonable for gas utilities to consider price stability as part of their management of gas supply; however, the gas utility that engages in a risk-management program, as part of its supply service obligation for its sales customers, should not be required to be in the business of risk-management by having the Department impose an incentive mechanism imposed upon it (id. at 6). The Attorney General also strongly opposes the use of incentive mechanisms as part of LDCs' risk-management program (Attorney General at 18). The Attorney General explains that the Department should not allow any "incentive mechanism" due, among other reasons, to the possibility that there could be some significant financial losses as the result of trading derivatives that include an incentive mechanism (id.). The Attorney General further explains that, even though the Department might limit the risk for customers, the fact that the utility may face large losses that would leave it crippled financially and unable to safely perform its basic gas transportation obligations means that the Department may still have a serious problem that it must deal with to ensure that the utility continues to serve (id.).

Like KeySpan and the Attorney General, the Competitive Suppliers strongly oppose the use of incentives for LDC merchant service, arguing that once incentives are introduced to markets that could be competitive, the LDC will lose all neutrality with respect to customers' choice of supplier, thus effectively spelling the end of the competitive market (Competitive Suppliers at 9). The Competitive Suppliers explain that if a LDC desires to be rewarded for gas purchasing, they should set up an unregulated affiliate and compete for customers the same way that third-party suppliers compete for customers (id.). The Competitive Suppliers observe that LDCs currently bear little or no risk for purchasing gas if they perform in a prudent manner, since they are allowed to recover all costs dollar for dollar; hence they do not incur the same risks as a competitive supplier (id.). The Competitive Suppliers argue that incentives, if allowed, would tilt the playing field in favor of the LDC because the LDC currently has the majority of the customer base, and would no longer have an interest in exiting the merchant function (id. at 9 and 10).

DOER also does not support an incentive mechanism in conjunction with LDC risk-management programs for a number of reasons. First, DOER notes that a risk-management program is more similar to buying an insurance policy against price spikes and volatility; as such the programs should not have incentive clauses (DOER at 18). Second, DOER notes that, at this time, the LDCs, the Department, and the other interested parties, including DOER, have virtually no experience with the hedging tools and techniques referred to in some of the comments, making it difficult to define a fair and reasonable incentive benchmark (id.). Third, DOER states that it cannot support an incentive mechanism at this time because of the magnitude of the potential costs and savings (id.). DOER observes that a LDC's purchased gas costs constitute the vast majority of its expenses and dwarf the LDC's allowed return on equity; therefore, an inappropriate incentive mechanism could result in significant negative repercussions for the LDC or its customers (id. at 18 and 19). DOER notes that the risk factor and the potential costs of including an incentive mechanism in a LDC risk-management program far outweigh the potential benefits (id. at 19). Finally, DOER states that giving LDCs an incentive mechanism in their risk-management programs will provide a disincentive for LDCs to exit the merchant business, which will hinder progression towards the Department's goal of promoting a competitive marketplace in Massachusetts (id.).

NStar takes the position that if the Department were to establish price stability as the overriding purchasing objective, then an incentive mechanism could be employed, but is not necessary (NStar at 16). NStar explains that under the Department's current framework (which has a least-cost objective), a LDC has the obligation to minimize gas costs and shoulders the risk of non-recovery of gas costs where purchases are found to be imprudent (id. at 16-17). NStar further explains that if the Department were to change its purchasing objectives to focus on price stabilization and to institute a pre-approval process, then the LDC would be obligated to undertake purchases within the parameters of the Department's announced policy and would be subject to the risk of non-recovery of gas costs where purchases are found to be imprudent (id. at 17). NStar notes that if a LDC is proposing to profit from a proposed purchasing program, then it would be appropriate to establish a risk-sharing structure (id.). LEAN argues that under current statutes, LDCs are obliged to provide high quality service at just and reasonable rates; hence, there is no evidence that any incentive beyond a regulated (and thus protected) rate of return should be provided as an inducement to comply with the statutory requirement of just and reasonable rates (LEAN at 14).

A second group of commenters, including Blackstone, Duke, El Paso, Planalytics, and Weatherwise, contend that an incentive mechanism should be a part of LDCs' risk-management programs. Blackstone states that an incentive mechanism should be a voluntary provision in any risk-management plan to be reviewed and approved by the Department, if appropriate (Blackstone at 4). Duke notes that the answer to whether an incentive mechanism should be used in conjunction with a risk-management program depends on whether the LDC is functioning in a fully-deregulated retail market or as a regulated utility (Duke at 7). Duke states that in the case of a regulated utility, the LDC should have an incentive mechanism built into its participation in a risk-management program in order to encourage such participation (id.). Furthermore, Duke states that if the LDC wants or needs to engage the expertise of an experienced gas trader/buyer in managing price risks, a system of incentives would help pay for that service (id.).

El Paso states that an incentive mechanism should definitely be part of a LDC's risk-management program (El Paso at 10). El Paso argues that innovation is encouraged when it can be rewarded, and without an incentive mechanism LDCs will be less motivated to expand the expertise of their staffs and/or seek the risk-management expertise that resides in large nationally-based energy providers, making progress toward lower, more stable prices slower (id.). Weatherwise similarly argues that a willingness to allow LDCs to benefit from risk-management programs will encourage innovation and help ensure program success (Weatherwise at 7). Weatherwise notes that, in particular, the Department should allow LDCs to establish fixed-bill program fees that reasonably compensate them for the risk they assume and potentially allow them to profit from successful programs (id.).

DNL argues in favor of incentive mechanism as a way to encourage LDCs to participate in risk-management programs (DNL at 10). Finally, Planalytics notes that because risk-management programs contain a diversified portfolio of many types of purchases, an incentive mechanism is one way to give LDCs a compelling reason to use their best efforts to save the ratepayer money (Planalytics at 6).

B. Analysis and Findings

The Department notes that nine commenters are against and six are in favor of the use of incentive mechanisms in conjunction with LDCs' risk-management programs. The commenters who oppose the use of incentive mechanisms in conjunction with LDCs' risk-management programs, do so either because they believe that incentive mechanisms would negatively affect the development of retail competition and customer choice in Massachusetts by tilting the "playing field" in favor of LDCs, or because they believe that adequate incentive mechanisms already exist for LDCs, and that no new incentive mechanisms are needed.

The Department agrees with Bay State that incentive mechanisms would be more appropriately associated with programs whose objective is to lower costs or increase service quality, than with financial hedging programs whose objective is to mitigate price volatility.

The Department notes that for programs where the objective is to lower costs, it is easier for a LDC to establish benchmarks which provide an accurate and timely representation of market conditions. These benchmarks are based on readily available, transparent, and independently verifiable information such as the Henry Hub commodity prices, the NYMEX futures prices, or other standard published indices. However, it would be difficult to establish similarly well-defined and measurable benchmarks for incentive mechanisms for financial hedging programs whose objective is to mitigate price volatility.

The Department agrees with the Competitive Suppliers that the use of incentive mechanisms in conjunction with LDCs' risk-management programs could favor the LDCs. The Department notes that incentive mechanisms in the form of financial rewards would lower the effective cost of LDCs' participation in financial risk-management programs relative to the costs that third-party marketers would incur for offering the same or similar risk-management products to their customers. This is because such incentive mechanisms would not be available to the marketers who, unlike the LDCs, are exposed to the risk of non-recovery of hedging costs from their customers. This could lead to unfair competition in the retail gas market.

In Incentive Regulation, D.P.U. 94-158, at 40-41 (1995), the Department stated that its primary objective of incentive regulation is:

> to provide marketplace benefits to consumers by promoting more efficient utility operations, cost control, and opportunities for reduced electric and gas rates. In addition to delivering marketplace benefits to consumers, incentive regulation should also provide an opportunity for each electric and gas company to adjust to competition as it develops. Incentive regulation should accomplish this while still achieving the Department's longstanding goal of safe, reliable, and least-cost service.

With respect to incentives, the Department concludes that the use of incentive mechanisms in conjunction with LDCs' financial risk-management programs: (1) would not be consistent with the Department's goal of promoting market-based regulation and enhanced competition in that it would not "serve as a vehicle to a more competitive environment"; and (2) could negatively affect the development of retail competition and customer choice in Massachusetts. D.P.U. 94-158, at 59. The Department, therefore, rejects the use of incentive mechanisms in conjunction with LDCs' risk-management programs.

V. STANDARD OF REVIEW FOR GAS RISK-MANAGEMENT PROGRAMS

A. Summary of the Comments

Commenters proposed three standards of review for gas risk-management plans: (1) a full prudence review of hedging programs to ensure that the costs proposed are necessary and reasonable; (2) a standard of review similar to Department review of incremental resources, or the review of a company's long-range forecasts pursuant to G.L. c. 164, § 69I; and (3) a case-specific "reasonableness" standard that includes a case-by-case review of gas risk-management programs.

The Attorney General states that the Department should not approve a risk-management program without a "definite showing of net benefits to customers," and that costs associated with a risk-management program are "necessary and reasonable" and "prudently incurred." (Attorney General at 5, 16). The Attorney General suggests that the Department conduct prudence reviews, similar to (pre-electric restructuring) Generating Unit performance reviews for electric management and operations of their generating plants (Attorney General at 16).

See G.L. c. 164, § 94G. However, some commenters have noted that LDCs should not be subject to hindsight review, and that the Department should not second guess programs based upon a comparison of hedged prices to actual market prices (Baystate at 13, Berkshire at 9-10, Blackstone at 3, Fitchburg at 7, Keyspan at 5).

Berkshire Gas Company suggests that the Department should apply a similar standard of review to the one currently used by the Department for its review of incremental resources, or the review of a company's long-range forecasts pursuant to G.L. c. 164, § 69I (i.e., "least-cost" standard) (Berkshire at 10).[9] However, some commenters note that the standard of "least-cost" gas supplies could not be ensured through a gas risk-management program because the programs could involve some additional costs and could result in prices that are higher than they would have been without a risk-management program (Keyspan at 2; NStar at 12-13).

Keyspan states that the Department should review each risk-management program to determine whether it is "reasonably designed to accomplish the dual objectives of price minimization and stability" (Keyspan at 3). NStar suggests that the Department establish "clearly-defined objectives" and evaluate any proposed program on whether it is "reasonably designed to achieve the Department's objectives" (NStar at 14). Baystate and DOER provide general criteria on how the Department should evaluate risk-management programs (e.g.,

---

[9] In approving long-range forecasts for gas companies, the Department is required to ensure "a necessary energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost." G.L. c. 164, § 69I; Colonial Gas Company, D.P.U. 96-18, at 31; Commonwealth Gas Company, D.P.U. 92-159, at 53, Colonial Gas Company, D.P.U. 93-13, at 50.

consistent with Department guidelines, allow for adequate assessment of performance, costs are reasonable in relation to anticipated benefits, costs limited to Department-established limits) (Bay State at 13; DOER at 15-18).

B. Analysis and Findings

The Attorney General argues that costs associated with LDC risk-management programs be "necessary and reasonable" and "prudently incurred" similar to the standard required by G.L. c. 164, § 94G when reviewing generating unit performance reviews.[10] However, the Department commenced this investigation pursuant to the Department's general supervisory authority over LDCs, authority to determine rates, and to review and approve the price to be paid for gas, G.L. c. 164, §§ 76, 94A, and not G.L. c.164, § 94G. D.T.E. 01-100, at 1.

When reviewing the price to be paid for gas pursuant to G.L. c. 164, § 94A, the Department examines whether the acquisition of the resource is "consistent with the public interest." Berkshire Gas Company, D.T.E. 98-110, at 1 (1999) (citations omitted). With respect to rate making, the Department is "free to select or reject a particular method of rate making as long as its choice does not have a confiscatory effect or is not otherwise illegal."

---

10 Prior to electric restructuring, the Department used performance reviews to audit the prudence of electric utilities' management and operations of their generating plants. In addition, G.L. c. 164, § 94G also explicitly prescribed procedures concerning fuel charges, goal-settings and oil conservation adjustments. Performance reviews are no longer required. Pursuant to the Electric Industry Restructuring Act, St. 1997, c. 164, §§ 239, 240, the Department granted Massachusetts electric distribution companies exemptions from some or all of the requirements of G.L. c. 164, § 94G, including performance reviews, fuel charges, goal-settings and oil conservation adjustments. See Boston Edison Company et al., D.T.E. 98-13 (A-F) (1998).

American Hoechest Corp. v. Department of Public Utilities, 379 Mass. 408, 413 (1980) (Department could order that all classes of customers, and not just residential users, share equally in cost of making reduced rates available for elderly poor). Accordingly, we decline to apply the prudence standard of review in evaluating risk-management programs because this is not a § 94G proceeding, and this type of review is not otherwise required.

The Department agrees with the majority of commenters who state that the implementation of risk-management programs would be designed to stabilize prices but would not necessarily result in a "least-cost" gas supply or minimize costs. As noted, due to the volatile and unpredictable nature of commodity derivatives markets, financial risk-management programs are unlikely to consistently produce prices below index levels. Therefore, the Department rejects applying the least-cost standard of review when evaluating risk-management programs.

Rate continuity and the avoidance of "rate shock" have also been considerations in Department ratemaking policy in addition to "least cost" supply planning. See Mass-American Water Company, D.P.U. 95-118, at 73 (1996) (Department favors approaches to financing facilities that mitigates rate shock). In assessing LDC Gas Adjustment Factor filings, the Department stated that it is "faced with the difficult task of balancing cost recovery at rates that may challenge our goal of rate continuity … against the potentially greater harm of increasing deferrals to be recovered in the future." Petitions of Bay State Gas Company, et al., D.T.E. 01-09 through D.T.E. 01-18, at 6 (2001). When approving LDC supply contracts pursuant to G.L. c. 164, § 94A, the Department can consider non-price attributes in addition to price considerations, including, but not limited to, flexibility of nominations, and reliability and diversity of supplies. D.T.E. 98-110, at 1. We conclude that a LDC risk-management program in which: (1) customer participation is voluntary; and (2) the program's costs are recovered solely from those customers participating in the program, is consistent with Department precedent and the public interest because the program may stabilize prices and avoid rate shock during a period of price volatility. Once the LDC presents a specific plan to the Department, the Department will determine the reasonableness of each plan, and establish parameters on a case-by-case basis. The burden will be on the LDC to establish that its risk-management plan is reasonably designed to meet the objective of price stability.

In sum, the Department directs a company proposed risk-management plan to: (1) allow customers to volunteer to participate in the plan; (2) maintain the objective of volatility mitigation and price stability rather than the objective of procuring prices below indices; (3) ensure fair competition in the gas supply market; (4) allocate all costs to program participants only; (5) demonstrate the effect that the plan would have on the reliability and transparency of commodity price; and (6) contain no incentive mechanisms.

VI. ORDER

Accordingly, after due notice, hearing and consideration the Department

ORDERS: That Bay State Gas Company, Blackstone Gas Company, The Berkshire Gas Company, Fitchburg Gas and Electric Company, New England Gas Company (Fall River Division and North Attleboro Division), KeySpan Energy Delivery-New England, and NStar Gas Company follow the directives in this Order.

By Order of the Department,

Paul B. Vasington, Chairman

James Connelly, Commissioner

W. Robert Keating, Commissioner

Eugene J. Sullivan, Jr., Commissioner

Deirdre K. Manning, Commissioner